Canon Paleo Curriculum
Unit: The Nature of Science
Lesson Plan 2

Activity Name: Scientific Method

Preparation:

Copy activity for students to complete

Activity:

Pass out activity sheet.
Go over the exercise with the class.
Have them answer the bottom questions.

Concept:

Students learn how a scienctist sets up a simple hypothesis. Students also learn how to set up control and variable in an experient and finally how to draw a conclusion.

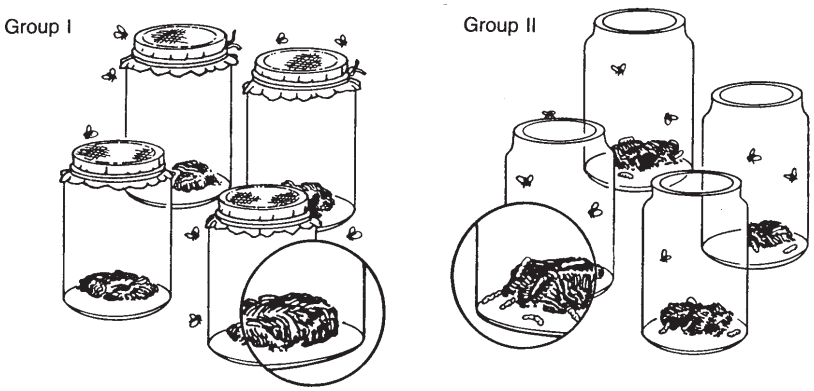
Discussions:

Ask students what other kinds of variables might have been tested and have them speculate on conclusions.

Time: 25-30 minutes

Scientific Method

Long ago, many people believed that living things could come from nonliving things. They thought that worms came from wood and that maggots came from decaying meat. This idea was called spontaneous generation. In 1668, an Italian biologist, Francesco Redi, did experiments to prove that maggots did not come from meat. One of his



experiments is shown below.

Redi placed pieces of meat in several jars. He divided the jars into two groups. He covered the first group of jars with fine cloth. He left the second group of jars uncovered. Redi observed the jars for several days. He saw flies on the cloth of the covered jars, and he saw flies laying eggs on the meat in the uncovered jars. Maggots appeared only on the meat in the group of jars left uncovered.

1. Scientists use a series of organized steps called scientific method to solve problems. List the steps that are often used. _____

_____

2. What was the problem in Redi's experiment ? _____

3. What do you think his hypothesis was? _____

_____

4. How did he test his hypothesis? _____

_____

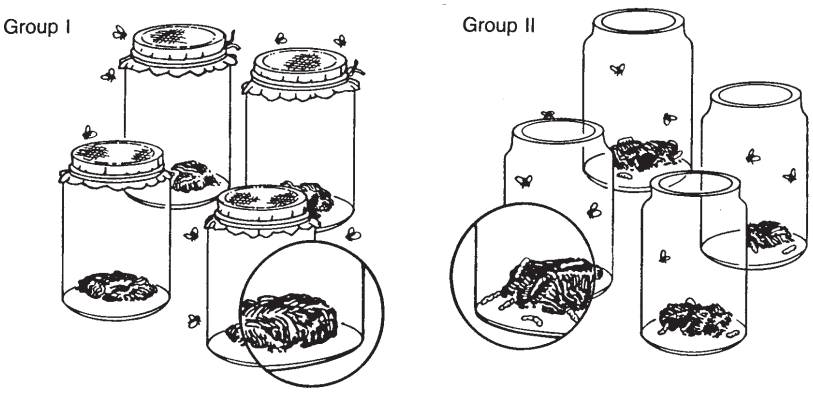
5. What was the variable in his experiment? _____

6. What was the control in his experiment? _____

7. What do you think Redi's conclusion was.? _____

KEY FOR TEACHERS
Scientific Method

Long ago, many people believed that living things could come from nonliving things. They thought that worms came from wood and that maggots came from decaying meat. This idea was called spontaneous generation. In 1668, an Italian biologist, Francesco Redi, did experiments to prove that maggots did not come from meat. One of his experiments is shown below.



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1. Scientists use a series of organized steps called scientific method to solve problems. List the steps that are often used. identify problem, research, form hypthesis experiment, conclusion

2. What was the problem in Redi's experiment? No maggots come form decaying meat.

3. What do you think his hypothesis was? If maggots come from decaying meat, then maggots will appear in covered and uncovered jars.

4. How did he test his hypothesis? Experiment with meat in covered and uncovered jars.

5. What was the variable in his experiment? covered jar

6. What was the control in his experiment? uncovered jar

7. What do you think Redi's conclusion was.? Maggots do not come from decaying meat.